

REMARKS

Reconsideration of the application, as amended is respectfully requested.

Claims 32, 37, 41-43, 45-46 stand rejected under 35 U.S.C. 102(b) as being anticipated by Ritchart et al., Patent No. 4,994,069. Applicants respectfully traverse.

Claim 32 has been amended to require that the remodelable ECM biomaterial be effective to become remodeled by patient tissue so that an all-natural blockage remains fully occluding the vessel.

Ritchart does not disclose a method that will lead to all-natural blockage remaining in the vessel fully occluding the vessel. Each and every occlusion occurring in Ritchart will have a vaso-occlusive wire embedded in the occlusive mass. This metal or polymer wire will remain in the vessel indefinitely—an outcome that is in direct contrast to claim 32 where an all-natural blockage remains fully occluding the vessel.

In one embodiment (shown in Figure 10), Ritchart teaches further injecting a vaso-occlusive fluid material such as a collagen bolus as backfill against the wire mass. However, Ritchart explains that the purpose of the backfill is to allow slow release of an embedded drug, and that the backfill remains in the vessel only temporarily.

In the BACKGROUND OF THE INVENTION, Ritchart explains that conventional collagen fluids (e.g., the collagen bolus in Figure 10) provide only a temporary vessel occlusion (column 3, lines 47-52), and that such fluids typically provide good short-term vaso-occlusion but ultimately will be carried away (by blood), resulting in recanalization of the vessel (column 1, line 42). Thus, even though Ritchart might incorporate collagen into his methods, he does not disclose a single method that will lead to all-natural blockage remaining in the vessel fully occluding the vessel as required by claim 32.

For at least this reason, Ritchart does not teach or suggest the subject matter of claim 32, and therefore withdrawal of this rejection is solicited. Further, because claims 37 and 41-43 are ultimately dependent upon claim 32, they also are patentable over Ritchart for at least these same reasons. Withdrawal of these rejections is therefore also solicited.

Claims 27, 29, 31, 33, 35, 40 and 44 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ritchart et al., Patent No. 4,994,069 in view of Badylak et al., Patent No. 5,275,826. Applicants respectfully traverse.

Claim 27 has been amended to require that the harvested submucosal tissue be remodelable. The remodelable submucosal tissue is effective to promote cellular invasion and ingrowth into the embolization device and to become remodeled with patient tissue so that an all-natural blockage remains in the vessel.

Because claim 27 requires that an all-natural blockage remains fully occluding the vessel, and because each and every method in Ritchart results in a metal or polymer coil remaining behind in the vessel indefinitely, Ritchart does not teach or suggest the subject matter of claim 27.

Further, no modification of Ritchart in view of Badylak would have led one of ordinary skill in the art to the method of claim 27. Even if this person would have substituted Badylak's fluidized SIS for the collagen bolus in Figure 10, the end result in the vessel still would have had a vaso-occlusive wire embedded in the occlusive mass. This outcome is in direct contrast to claim 27 which requires that an all-natural blockage remains in the vessel fully occluding the vessel.

For at least these reasons, the combination of Ritchart and Badylak does not teach or suggest the subject matter of claim 27, but in fact teaches squarely away from it. Withdrawal of this rejection is therefore solicited. Further, because claims 29, 31, 33, 35, 40, 44 and 45 are ultimately dependent upon one of claims 27 or 32, they also are patentable over a combination of Ritchart and Badylak for at least these same reasons. Therefore, withdrawal of these rejections also is solicited.

Claims 47-48, 50, 55-58, and 61-62 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ritchart et al., Patent No. 4,994,069 in view of Badylak et al., Patent No. 5,275,826 and further in view of Broock et al., Patent No. 6,187,024. Applicants respectfully traverse.

Claim 47 continues to require that the thrombogenic collagenous biomaterial be biodegradable and promote a healing response in the patient so as to result in an all natural blockage of the blood vessel in the patient. Thus, for at least the reasons stated above, the combination of Ritchart and Badylak does not teach or suggest the subject matter of claim 27. Further, Broock does not teach anything that would cure the above-described deficiencies in the Ritchart-Badylak combination. Withdrawal of this rejection is therefore solicited. Further, because claims 48 and 50 are ultimately dependent upon claim 47, they also are patentable over a combination of Ritchart, Badylak and Broock for at least these same reasons. Therefore, withdrawal of these rejections also is solicited.

Claim 55 has been amended to require that an all-natural blockage remain in the blood vessel or the aneurysm. Thus, for at least the reasons stated above, the combination of Ritchart, Badylak, and Broock does not teach or suggest the subject matter of claim 55. Withdrawal of

this rejection is therefore solicited. Further, because claims 57 and 58 are ultimately dependent upon claim 55, they also are patentable over a combination of Ritchart, Badylak and Brook for at least these same reasons. Therefore, withdrawal of these rejections also is solicited.

Claim 61 has been amended to require that an all-natural blockage remain in the aneurysm. Thus, for at least the reasons stated above, the combination of Ritchart, Badylak, and Brook does not teach or suggest the subject matter of claim 61. Withdrawal of this rejection is therefore solicited.

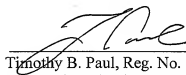
Entry of the above-made amendment and favorable consideration of this application are requested. If the Examiner should have any questions regarding this response or other comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact the applicants' undersigned representative by telephone.

Request for Interview

In the event that the Examiner finds any reason that the application cannot be allowed in its present form, the Applicant wishes to conduct an interview with the Examiner prior to any further action in order to provide an opportunity for coming to agreement upon allowable claims. To arrange the interview, the Examiner is requested to call the undersigned attorney at the telephone number given.

Respectfully submitted,

By



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